

**Sharon Hope's Lecture Notes for:**

***IEEE/PES All Councils Conference, subtitled The Power of the IEEE***

***Saturday, June 10, 7:30 to 4:00, at the Universal City Hilton Hotel***

*(One of 2 or more speakers from 10:30 - 11:30, Estimated 15 minute talk + Questions)*

**Specific Presentation by Sharon Hope:**

**Applying Y2k Teams to IT Security Issues**

Newspaper Cartoons: 1: From Y2K, 2: I Love You Virus

**Lessons from Y2K**

Congratulations to Y2K Veterans!

Government & Industry vs common threat

    Largest joint effort since WWII

    Largest peacetime effort in history

CIO into the spotlight

Recognition of IT as central to infrastructure

**IT Process**

Top down imperative

Triage = System engineering of entire business

Work Internal and external dependencies

    IT equipment firmware

    Application Software

    OS

    Data

Standard Practice

    Awareness

    Inventory

    Assessment

    Renovation

    Validation

    Implementation

    Plus: Contingency Planning

Responsive to volatile information

    Additional vulnerabilities

    COTS bug fix releases

**ITS is a Growing National Concern for Government & Private Sector**

News items, Legislation, National Policies

**GAO Suggestion in October 99: CRITICAL INFRASTRUCTURE PROTECTION  
Comprehensive Strategy Can Draw on Year 2000 Experiences**

Larger threat than Y2K

- Virus & hackers
- Disgruntled Employees
- Industrial Espionage
- Cyberterrorism

Summarize Y2K similarity points for top-down security initiative.

- 2 Billion\$ budget requested
- Requires same top-down approach
- Best Practices & lessons learned from Y2K
- ITS Initiative – Govt & Business

**Publicly Available Resources/Info**

General:

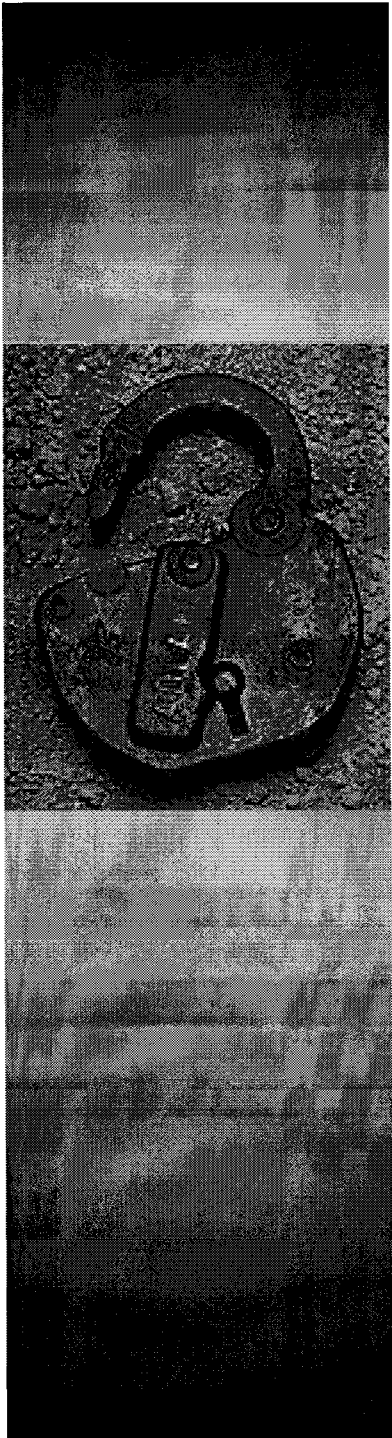
- Government: White House and Congress
- Bills, Testimony, State of Union Address
- Call for Govt & Industry vs new threat

Government URLs:

- NIST
- GAO
- OMB
- Etc.

Commercial Resources

- ITAA Newsletter
- Magazines
- Websites
- Email Subscriptions
- Training & Certification



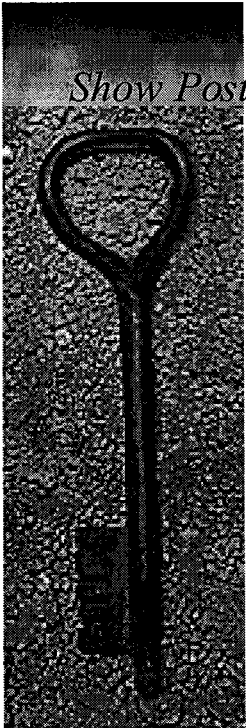
# Applying Y2K Teams to IT Security Issues

Sharon Hope

*for the IEEE/PES All Councils Conference*

*10 June 2000*

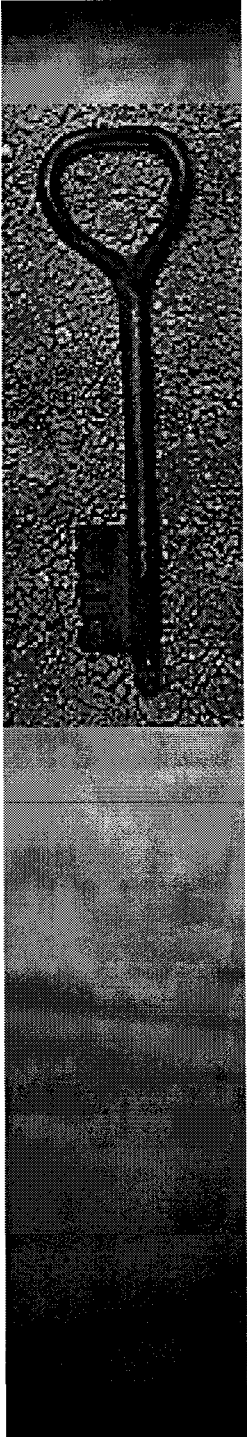
*Show Post-Y2K Cartoon*



10 June, 2000

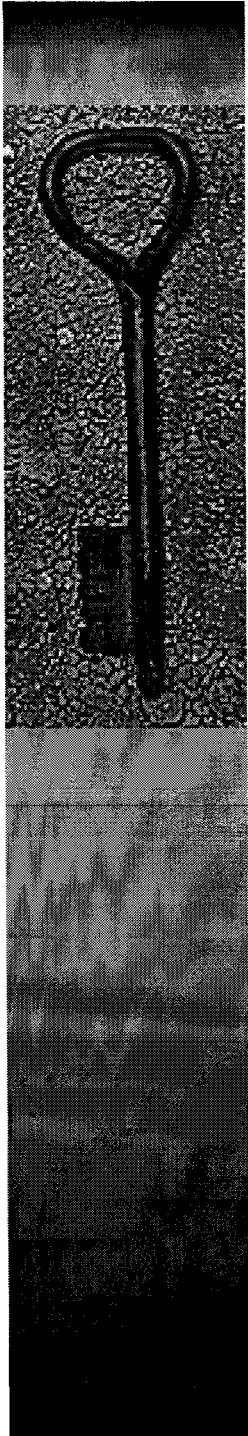
Sharon Hope: Applying Y2K Teams to IT Security Issues





# Lessons from Y2K

- ◆ Congratulations to Y2K Veterans!
- ◆ Government & Industry vs common threat
  - Largest joint effort since WWII
  - Largest peacetime effort in history
- ◆ CIO into the spotlight
- ◆ Recognition of IT as central to infrastructure



# IT Process for Y2K (1 of 3)

- ◆ Top Down Approach was Imperative
- ◆ Triage = System Engineering of Enterprise
- ◆ Manage Internal and External Dependencies
  - IT Equipment Firmware
  - Application Software
  - OS
  - Data
  - External Interfaces
  - Supply Chain



# IT Process for Y2K (2 of 3)

## ◆ Standard Practice

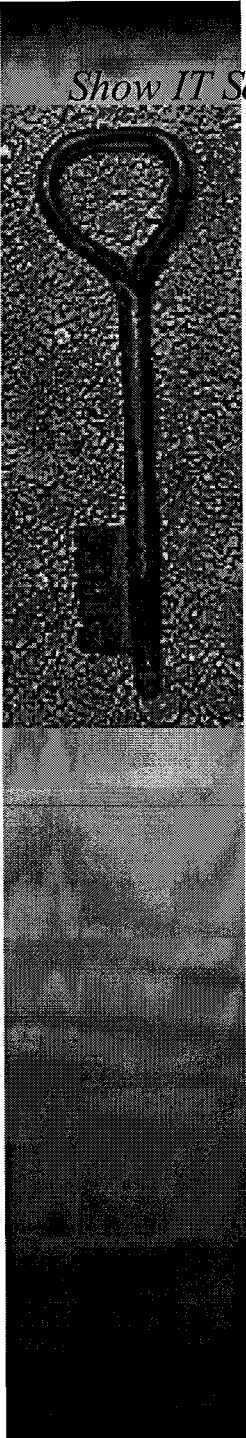
- Awareness
- Inventory
- Assessment
- Renovation
- Validation
- Implementation
- Plus: Contingency Planning



# IT Process for Y2K (3 of 3)

- ◆ Respond to Volatile Information
  - Additional Vulnerabilities Discovered
  - COTS Bug Fix Releases
- ◆ Eliminate Massively Redundant Activities
- ◆ Enforce Best Practices
  - Test
  - Configuration Management

*Show IT Security Cartoon*



10 June, 2000

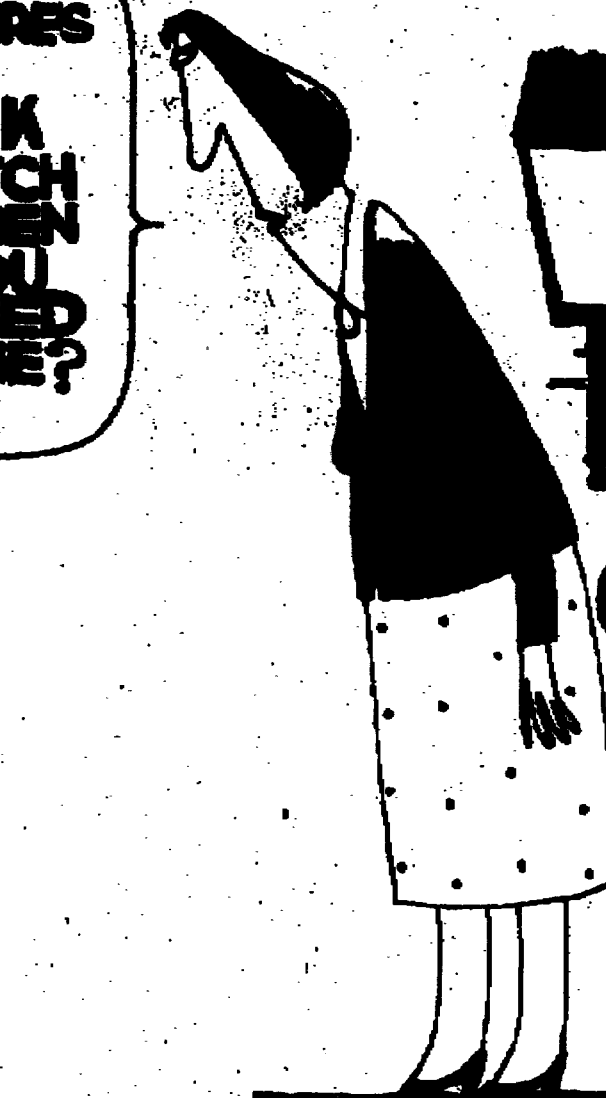
Sharon Hope: Applying Y2K Teams to IT Security Issues

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SKILL

HERE ARE ALL OF  
YOUR HOLIDAY  
SHOPPING BILLS,  
RIGHT ON  
TIME.

WHERE'S  
A  
Y2K  
GLITCH  
WHEN  
YOU  
NEED  
ONE?





# IT Security a Growing National Concern for Government & Industry

- ◆ News items, Legislation, National Policies
- ◆ Larger threat than Y2K
  - Virus & Hackers
  - Disgruntled Employees
  - Industrial Espionage
  - Cyber Terrorism
- ◆ National Plan for Information Systems Protection
- ◆ FY 2000 Federal Budget Target: \$2 Billion



## ***GAO: Comprehensive Strategy Can Draw on Year 2000 Experiences (1 of 2)***

- ◆ Y2K has laid a foundation for longer term improvements in the way we view, manage, and protect computer systems supporting our nation's critical infrastructures. These areas include:
  - providing high-level congressional and executive branch leadership,
  - understanding risks to computer-supported operations,
  - providing adequate technical expertise,
  - providing standard guidance,



## ***GAO: Comprehensive Strategy Can Draw on Year 2000 Experiences (2 of 2)***

- establishing public-private sector relationships,
- facilitating progress and monitoring performance,
- developing an incident identification and coordination capability, and
- implementing fundamental information technology management improvements.

These factors...should be considered when developing a national strategy for critical infrastructure protection.



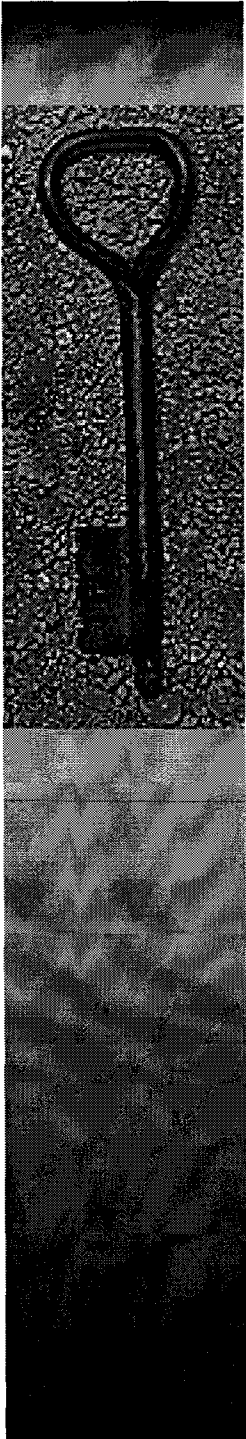
# Resources: Government URLs

## White House:

- <http://www.pub.whitehouse.gov/uri-res/I2R?urn:pdi://oma.eop.gov.us/2000/2/15/4.text.1>
- <http://www1.whitehouse.gov/WH/EOP/NSC/html/nschome.html>
- <http://www1.whitehouse.gov/WH/EOP/NSC/html/documents/npisp-execsummary-000105.pdf>
- <http://www1.whitehouse.gov/WH/EOP/NSC/html/documents/npisp-fullreport-000112.pdf>

Congress: [http://www.house.gov/science/106\\_hearing.htm#Technology](http://www.house.gov/science/106_hearing.htm#Technology) and  
<http://www.senate.gov/~judiciary/techterr.htm>

- ◆ NIST: <http://csrc.nist.gov/events/newwelcome.html/> and <http://www.fedcirc.gov/>
- ◆ GAO: <http://www.gao.gov/audit.htm>
- ◆ DOJ: <http://www.usdoj.gov/criminal/cybercrime/>
- ◆ FBI: <http://www.emergency.com/fbi-nccs.htm> from <http://www.fbi.gov>
- ◆ Dept. Commerce: <http://www.ecommerce.gov/>



# Resources: Commercial

- ◆ ITAA Email Newsletter
- ◆ Year 2000 Email Newsletter
- ◆ Magazines
- ◆ Websites
- ◆ Email Subscriptions
- ◆ Training & Certification